

**IN THE CLAIMS:**

1-71. (cancelled)

72. (new) A method to generate a print image on a carrier material, comprising the steps of:

covering a surface of a print carrier with a wetting-aiding surfactant layer;

covering the surfactant layer with a fountain solution layer which is one of ink-repelling and ink-attracting;

in a structuring process generating ink-attracting regions and ink-repelling regions via structuring of the fountain solution layer corresponding to a structure of the print image to be printed, and wherein to structure the fountain solution layer, radiation of a light source is directed via a control element per image point onto the fountain solution layer dependent on a control signal;

applying at the surface ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions; and

transferring the applied ink onto the carrier material.

73. (new) A method according to claim 72 wherein the surfactant layer thickness is less than  $.1\mu\text{m}$ .

74. (new) A device to generate a print image on a carrier material, comprising:

a pre-treatment device that applies a wetting-aiding surfactant layer onto a surface of a print carrier;

a damping device that covers the surfactant layer with a fountain solution layer which is one of ink-repelling and ink-attracting;

an image generating station in which in a structuring process ink-attracting regions and ink-repelling regions are generated in the fountain solution layer corresponding to a structure of the print image to be printed;

an ink application station wherein ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions is applied on the surface;

an ink transfer station wherein the applied ink is transferred onto the carrier material;

the image generating station having a light source whose radiation is directed via a control element per image point toward the surface of the print carrier; and

the radiation being dependent on a control signal.

75. (new) A device according to claim 74 wherein the surfactant layer is less than  $.1\mu\text{m}$ .

76. (new) A device according to claim 75 wherein a plurality of PLZT control elements are arranged in at least one line as an array and the structuring occurs line-by-line.

77. (new) A device according to claim 76 wherein a gradient fiber element is used as an imaging optic that focuses radiation passed by the respective PLZT element.

78. (new) A device according to claim 74 wherein a DMD element is used as the control element.

79. (new) A device according to claim 74 wherein a wavelength of radiation radiated by said light source is adapted to the fountain solution layer.

80. (new) A device according to claim 74 wherein the print carrier comprises a band in the shape of a closed loop.

81. (new) A device according to claim 74 wherein the print carrier comprises a bend in the shape of a drum.

82. (new) A device according to claim 81 wherein the drum has cups receiving the fountain solution layer.

83. (new) A device according to claim 74 wherein a cooling system makes the fountain solution layer an ice layer.

84. (new) A device according to claim 74 wherein a cleaning station following the ink station removes remaining portions of the ink and fountain layer.

85. (new) A device according to claim 74 wherein the light source comprises a laser beam.

86. (new) A method to generate a print image on a carrier material, comprising the steps of:

providing a print carrier with a  $\text{SiO}_2$  coating on its surface;

charging the  $\text{SiO}_2$  coating at the print carrier surface with a water vapor and then drying the surface to form a  $\text{SiOH}$  hydrophilic molecule structure layer;

in a structuring process generating what will layer become ink-attracting regions and ink-repelling regions via structuring of the molecule structure layer corresponding to a structure of the print image to be printed, and wherein to structure the molecule structure layer, directing radiation of a light source via a control element per image point onto the molecule structure layer dependent on a control signal;

applying a fountain solution layer on the print carrier to create said ink-attracting and ink-repelling regions;

applying at the surface ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions; and

transferring the applied ink onto the carrier material.

87. (new) A device to generate a print image on a carrier material, comprising:

a print carrier with a  $\text{SiO}_2$  coating on its surface;

with a vapor station, charging the  $\text{SiO}_2$  coating at the print carrier surface with a water vapor;

with a drying device, drying the surface to form a  $\text{SiOH}$  hydrophilic molecule structure layer;

an image generating station in which in a structuring process what will become ink-attracting regions and ink-repelling regions are generated via structuring of the molecule structure layer corresponding to a structure of the print image to be printed;

a damping station which applies a fountain solution layer on the print carrier to create said ink-attracting and ink-repelling regions;

an ink application station wherein ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions is applied on the surface;

an ink transfer station wherein the applied ink is transferred onto the carrier material;

the image generating station having a light source whose radiation is directed via a control element per image point toward the surface of the print carrier; and

the radiation being dependent on a control signal.

88. (new) A device according to claim 87 wherein a plurality of PLZT control elements are arranged in at least one line as an array and the structuring occurs line-by-line.

89. (new) A device according to claim 88 wherein a gradient fiber element is used as an imaging optic that focuses radiation passed by the respective PLZT element.

90. (new) A device according to claim 87 wherein a DMD element is used as the control element.

91. (new) A device according to claim 87 wherein a wavelength of radiation radiated by said light source is adapted to the molecule structure layer.

92. (new) A device according to claim 87 wherein the print carrier comprises a band in the shape of a closed loop.

93. (new) A device according to claim 87 wherein the print carrier comprises a bend in the shape of a drum.

94. (new) A device according to claim 93 wherein the drum has cups receiving the fountain solution layer.

95. (new) A device according to claim 87 wherein a cooling system makes the fountain solution layer an ice layer.

96. (new) A device according to claim 87 wherein a cleaning station following the ink station removes remaining portions of the ink and fountain layer.

97. (new) A device according to claim 87 wherein the light source comprises a laser beam.

98. (new) A method to generate a print image on a carrier material, comprising the steps of:

covering a surface of a print carrier with a wetting-aiding surfactant layer;

in a structuring process generating what will become ink-attracting regions and ink-repelling regions via structuring of the surfactant layer corresponding to a structure of the print image to be printed, and wherein to structure the surfactant layer, radiation of a light source is directed via a control element per image point onto the surfactant layer dependent on a control signal;

covering the surface with a fountain solution layer to create said ink-attracting and ink-repelling regions;

applying at the surface ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions; and

transferring the applied ink onto the carrier material.

99. (new) A method according to claim 98 wherein the surfactant layer is less than  $.1\mu\text{m}$ .

100. (new) A device to generate a print image on a carrier material, comprising:

a pre-treatment device that applies a wetting-aiding surfactant layer onto a surface of a print carrier;

an image generating station in which in a structuring process what will become ink-attracting regions and ink-repelling regions are generated in the surfactant layer corresponding to a structure of the print image to be printed;

a dampening station which applies a fountain solution layer on said surface to create said ink-attracting regions and ink-repelling regions;

an ink application station wherein ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions is applied on the surface;

an ink transfer station wherein the applied ink is transferred onto the carrier material;

the image generating station having a light source whose radiation is directed via a control element per image point toward the surface of the print carrier; and

the radiation being dependent on a control signal.

101. (new) A device according to claim 100 wherein the surfactant layer is less than .1  $\mu\text{m}$ .

102. (new) A device according to claim 100 wherein a plurality of PLZT control elements are arranged in at least one line as an array and the structuring occurs line-by-line.

103. (new) A device according to claim 102 wherein a gradient fiber element is used as an imaging optic that focuses radiation passed by the respective PLZT element.

104. (new) A device according to claim 100 wherein a DMD element is used as the control element.

105. (new) A device according to claim 100 wherein a wavelength of radiation radiated by said light source is adapted to the surfactant layer.

106. (new) A device according to claim 100 wherein the print carrier comprises a band in the shape of a closed loop.

107. (new) A device according to claim 100 wherein the print carrier comprises a bend in the shape of a drum.

108. (new) A device according to claim 107 wherein the drum has cups receiving the fountain solution layer.

109. (new) A device according to claim 100 wherein a coating system makes the fountain solution layer an ice layer.

110. (new) A device according to claim 100 wherein a cleaning station following the ink station removes remaining portions of the ink and fountain layer.

111. (new) A device according to claim 100 wherein the light source comprises a laser beam.

112. (new) A method to generate a print image on a carrier material, comprising the steps of:

subjecting a surface of a print carrier to a corona treatment to create a hydrophilization layer via charging with free ions;

covering the hydrophilization layer with a fountain solution layer which is one of ink-repelling and ink-attracting;

in a structuring process generating ink-attracting regions and ink-repelling regions via structuring the fountain solution layer corresponding to a structure of the print image to be printed, and wherein to structure the fountain solution layer, radiation of a light source is directed via a control element per image point onto the fountain solution layer dependent on a control signal;

applying at the surface ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions; and

transferring the applied ink onto the carrier material.

113. (new) A device to generate a print image on a carrier material, comprising:

a hydrophilization station which subjects a surface of a print carrier to a corona treatment to create a hydrophilization layer thereon via charging with free ions;

a damping station which supplies a fountain solution layer which is one of ink-repelling and ink-attracting on the hydrophilization layer on the surface of the print carrier;

an image generating station in which in a structuring process ink-attracting regions and ink-repelling regions are generated in the fountain solution layer corresponding to a structure of the print image to be printed;

an ink application station wherein ink that adheres to the ink-attracting regions and that is not absorbed by the ink-repelling regions is applied on the surface;

an ink transfer station wherein the applied ink is transferred onto the carrier material;

the ink generating station having a light source whose radiation is directed via a control element per image point toward the surface of the print carrier; and

the radiation being dependent on a control signal.

114. (new) A device according to claim 113 wherein a plurality of PLZT control elements are arranged in at least one line as an array and the structuring occurs line-by-line.

115. (new) A device according to claim 114 wherein a gradient fiber element is used as an imaging optic that focuses radiation passed by the respective PLZYT element.

116. (new) A device according to claim 113 wherein a DMD element is used as the control element.

117. (new) A device according to claim 113 wherein a wavelength of radiation radiated by said light source is adapted to the fountain solution layer.



118. (new) A device according to claim 113 wherein the print carrier comprises a band in the shape of a closed loop.

119. (new) A device according to claim 113 wherein the print carrier comprises a bend in the shape of a drum.

120. (new) A device according to claim 119 wherein the drum has cups receiving the fountain solution layer.'

121. (new) A device according to claim 113 wherein a cooling system makes the fountain solution layer an ice layer.

122. (new) A device according to claim 113 wherein a cleaning station following the ink station removes remaining portions of the ink and fountain layer.

123. (new) A device according to claim 113 wherein the light source comprises a laser beam.

124. (new) A device according to claim 113 wherein the corona treatment is provided by a high voltage generator connected to an electrode adjacent a side of the print carrier where the fountain solution layer is applied.

125. (new) A device according to claim 113 wherein the corona treatment is provided by a high voltage generator connected to an electrode positioned at a side of the print carrier where the fountain solution layer is applied and at an opposite side of the print carrier an electrode plate being positioned.

126. (new) A device according to claim 113 wherein for the corona treatment a high voltage generator is provided connected to two electrodes positioned at a side of the print carrier where the fountain solution layer is provided and a blower is provided between the electrodes blowing down onto the print carrier.